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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,240	08/24/2001	John W. Davies	38190/206669	2206

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EXAMINER

TORRES, MELANIE

ART UNIT PAPER NUMBER

3683

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/939,240

Applicant(s)

DAVIES ET AL.

Examiner

Melanie Torres

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-9,11,12,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11,12,19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/26/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 6-8, 11, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06229426 in view of Bhatia et al.

Re claims 1, 7, 8, 19 and 20, JP 06229426 teaches a bearing assembly comprising a pair of bearing members (1, 2, 3) movable relative to one another, the pair including a first member (1, 2) and a second member (3) that define a space therebetween, at least the first member (1, 2) having a bearing surface having a relatively thin coating of a PTFE-based material (1a, 2a) thereupon and a grease lubricant (6) occupying the space defined between the first member and the second member, wherein the PTFE-based material and the grease lubricant act in conjunction with one another to lubricate the first and second members. It would have been obvious to have used a coating including a thermosetting stabilizer material as taught by Bhatia et al. in order to reduce thermal degradation in high temperature applications. (Column 13, lines 43 – Column 14, line 5) Further, it would have been an obvious matter of design choice to modify JP 06229426 by having a PTFE-based material thickness of about 0.003-0.007 inch since applicant has not disclosed that having such a thickness

solves any stated problem or is for any particular purpose and it appears that the bearing would perform equally well with a wide range of PTFE-based material thicknesses.

Re claims 4 and 11, JP 06229426 teaches wherein the first member (12) is formed from the group consisting of steel, titanium, aluminum, nickel, bronze and alloys thereof. (Column 1, lines 5-7)

Re claim 6, JP 06229426 teaches wherein the coating is a self-lubricating material.

3. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06229426 in view of Bhatia et al. and further in view of Furukoshi et al.

Re claims 2, and 9, JP 06229426 does not teach wherein the coating is a PTFE-based material having a solid particulate in a form selected from the group consisting of flocked, powdered, fibrous, flaked, or beaded. Furukoshi et al. teach wherein the coating is a PTFE-based material having a solid particulate in a form selected from the group consisting of flocked, powdered, fibrous, flaked, or beaded. (Column 3, lines 23-33) It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the PTFE-based material of Furukoshi et al. since powdered PTFE-based materials are well known for lubricating bearing elements.

4. Claims 5, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06229426 in view of Bhatia et al. and further in view of Furukoshi et al.

Re claims 5 and 12, Furukoshi et al. teach sliding bearing comprising a seal (17) positioned in the space defined between first and second members. It would have been obvious to have included a seal in the assembly of JP 06229426 as modified so as to reduce the amount of debris that would interfere with the operation of the bearing.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1, 2, 4-9, 11, 12, 19 and 20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie Torres whose telephone number is (703)305-0293. The examiner can normally be reached on Monday-Friday, 6:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on (703)308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in cursive script, reading "Melonie Torres".

October 4, 2004